

**PATENT**

Attorney Docket No. 231119

Client Reference No. E-017-2002/0-US-06

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Boyd et al.

Group Art Unit: Unassigned

U.S. National Phase of PCT/US03/15991

Examiner: Unassigned

Filed: Herewith

For: SCYTOVIRINS AND RELATED  
CONJUGATES, FUSION PROTEINS,  
NUCLEIC ACIDS, VECTORS, HOST  
CELLS, COMPOSITIONS,  
ANTIBODIES, AND METHODS OF  
USING SCYTOVIRINS

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

- ☒ **within** any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.
- ☐ **after** (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes *one* of:
- ☐ the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).
- or*
- ☐ the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and **within** thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).
- NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.

#### Copies of the References

- ☐ Copies of all of the references listed on the enclosed Form 1449 are enclosed herewith.
- ☒ Copies of U.S. patents and patent applications that are listed on the accompanying Form 1449 are not enclosed herewith. Copies of other references identified on the accompanying Form 1449 are enclosed herewith.
- ☐ Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3).
- ☒ A copy of the foreign search report is enclosed herewith.

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- ☐ The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

**Statement under 37 CFR 1.97(e)**

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ The **undersigned** hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

**Statement under 37 CFR 1.704(d)**

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

**Fees**

- ☒ No fee is owed by the applicant(s).  
☐ The IDS Fee of \$180 under 37 CFR 1.17(p) is enclosed herewith.

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**Method of Payment of Fees**

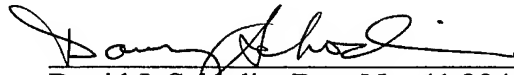
- ☐ Attached is a check in the amount of \$  
☐ Charge Deposit Account No. 12-1216 in the amount of \$ . (A duplicate copy of this communication is enclosed for that purpose.)

**Authorization to Charge Additional Fees**

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

**Instructions as to Overpayment**

- ☒ Credit Account No. 12-1216.  
☐ Refund

  
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Date: November 10, 2004

Substitute for form 1449A/B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	Unassigned	107513961
Filing Date	Herewith	
First Named Inventor	BOYD et al.	
Group Art Unit	Unassigned	
Examiner Name	Unassigned	
Attorney Docket Number	231119	

Sheet

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of

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## U.S. PATENT DOCUMENTS

Examiner Initials	Doc. No.	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
		Application or Patent Number	Kind Code			
	AA	5,314,995		Fell, Jr. et al.	May 24, 1994	
	AB	5,821,081		Boyd et al.	Oct. 13, 1998	
	AC	5,843,882		Boyd et al.	Dec. 1, 1998	
	AD	5,962,653		Boyd et al.	Oct. 5, 1999	
	AE	5,962,668		Boyd et al.	Oct. 5, 1999	
	AF	5,998,587		Boyd et al.	Dec. 7, 1999	
	AG	6,015,876		Boyd	Jan. 18, 2000	
	AH	6,245,737	B1	Boyd et al.	Jun. 12, 2001	
	AI	6,428,790	B1	Boyd	Aug. 8, 2002	

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Doc. No.	Foreign Patent Document			Name of Patentee or Applicant	Date of Publication	Translation	
		Office	Application or Patent Number	Kind Code			Yes	No**
	AJ	WO	93/06216		Oklahoma Medical Research Foundation	Apr. 1, 1993		

## OTHER - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No**
	AK	AGNEW et al., <i>Sex. Trans. Dis.</i> , 22(5), 269-273 (1995)		
	AL	AMON et al., <i>The Plant Cell</i> , 10, 781-789 (1998)		
	AM	ANDORFER et al., <i>J. Insect Phys.</i> , 46, 365-372 (2000)		
	AN	ANDREU et al., <i>J. Infect. Dis.</i> , 171, 1237-1243 (1995)		
	AO	AULLO et al., <i>EMBO J.</i> , 11(2), 575-583 (1992)		
	AP	BALZARINI et al., <i>Antiviral Res.</i> , 18, 191-207 (1992)		
	AQ	BERZOFISKY, <i>J. Acquired Immune Deficiency Syndromes</i> , 4, 451-459 (1991)		
	AR	BOLMSTEDT et al., <i>Mol. Pharmacology</i> , 59(5), 949-954 (2001)		
	AS	BOYD et al., <i>Antimicrob. Agents Chemother.</i> , 41(7), 1521-1530 (1997)		
	AT	BOYD, <i>AIDS Etiology, Diagnosis, Treatment, and Prevention</i> , 2 <sup>nd</sup> Ed., 305-317 (1988)		
	AU	BOYD et al., <i>J. Med. Chem.</i> , 37, 1740-1745 (1994)		
	AV	BRUCE et al., <i>Can. J. Microbiol.</i> , 34, 339-343 (1988)		
	AW	BUCKHEIT et al., <i>Antiviral Res.</i> , 21, 247-265 (1993)		
	AX	CAMMACK, <i>Curr. Opin. Infect. Dis.</i> , 14, 13-16 (2001)		
	AY	CAPON et al., <i>Annu. Rev. Immunol.</i> , 9, 649-678 (1991)		
	AZ	CAPON et al., <i>Nature</i> , 337, 525-531 (1989).		
	BA	CARONE et al., <i>J. Lab. Clin. Med.</i> , 100(1), 1-14 (1982)		
	BB	CARTER et al., <i>J. Org. Chem.</i> , 49, 236-241 (1984)		
	BC	CHARAN et al., <i>J. Nat. Prod.</i> , 63, 1170-1174 (2000)		
	BD	CHAUDHARY et al., <i>The Human Retroviruses</i> , Ch. 18, 379-387 (1991)		

Examiner Signature	Date Considered
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\* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

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DTN Rec'd PCT/PTO 1 0 NOV 2004

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	Unassigned <b>10/513961</b>
				Filing Date	Herewith
				First Named Inventor	BOYD et al.
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	2	of	3	Attorney Docket Number	231119

**OTHER - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No**
	B E	CHAUDHARY et al., <i>Nature</i> , 335, 369-372 (1988)		
	B F	CLANTON et al., <i>J. Acquired Immune Deficiency Syndromes</i> , 5, 771-781 (1992)		
	B G	COFFIN, <i>Science</i> , 267, 483-489 (1995)		
	B H	COHEN, <i>Science</i> , 267, 179 (1995)		
	B I	CRESSWELL et al., <i>Algal and Cyanobacterial Biotechnology</i> , 211-218 (1989)		
	B J	DAVEY et al., <i>J. Infect. Dis.</i> , 170, 1180-1188 (1994)		
	B K	DAVIS, <i>J. Pharm. Pharmacol.</i> , 44(Suppl. 1), 186-190 (1992)		
	B L	DE CLERCQ, <i>Adv. In Virus Res.</i> , 42, 1-55 (1993)		
	B M	DE CLERCQ, <i>J. Acquired Immune Deficiency Syndromes</i> , 4(3), 207-218 (1991)		
	B N	DOES et al., <i>Plant Mol. Biol.</i> , 39, 335-347 (1999)		
	B O	DORSEY et al., <i>Protease Inhibitors in AIDS Therapy</i> , Ch. 4, 65-84		
	B P	DUNCAN et al., <i>Protease Inhibitors in AIDS Therapy</i> , Ch. 2, 27-48		
	B Q	ELMER et al., <i>JAMA</i> , 275(11), 870-876 (1996)		
	B R	FAULKNER, <i>Nat. Prod. Rep.</i> , 355-394 (1994)		
	B S	FLINT et al., <i>Virlogy Molecular Biology, Pathogenesis, and Control</i> , Ch. 19, 662-714 (2000)		
	B T	FRANKMOLLE et al., <i>J. Antibiotics</i> , 45(9), 1451-1457 (1992)		
	B U	FREED et al., <i>Bull. Inst. Pasteur.</i> , 88, 73-110 (1990)		
	B V	FUNG et al., <i>J. Immunology</i> , 145(7), 2199-2206 (1990)		
	B W	GARTNER et al., <i>Techniques in HIV Research</i> , Ch. 3, 59-63 (1994)		
	B X	GULAKOWSKI et al., <i>J. Virol. Methods</i> , 33, 87-100 (1991)		
	B Y	GUSTAFSON et al., <i>J. Med. Chem.</i> , 35, 1978-1986 (1992)		
	B Z	HARATA et al., <i>J. Mol. Biol.</i> , 297, 673-681 (2000)		
	C A	HILIER et al., <i>Clin. Infect. Dis.</i> , 16(Suppl 4), S273-S281 (1993)		
	C B	HOLS et al., <i>Appl. and Environ. Microbiol.</i> , 60(5), 1401-1413 (1994)		
	C C	HUSSON et al., <i>J. Pediatr.</i> , 121(4), 627-633 (1992)		
	C D	KASHMAN et al., <i>J. Med. Chem.</i> , 35, 2735-2743 (1992)		
	C E	KEMPTF, <i>Protease Inhibitors in AIDS Therapy</i> , Ch. 3, 49-64		
	C F	KILBY et al., <i>Nature Medicine</i> , 4(11), 1302-1307 (1998)		
	C G	KRISHNAMURTHY et al., <i>PNAS USA</i> , 86, 770-774 (1989)		
	C H	LANGNER et al., <i>Arch. Virol.</i> , 130, 157-170 (1993)		
	C I	LIFSON et al., <i>J. Exp. Med.</i> , 164, 2101-2106 (1986)		
	C J	LIN et al., <i>Antimicrob. Agents Chemother.</i> , 33(12), 2149-2151 (1989)		
	C K	LIQU et al., <i>Biochemistry</i> , 38, 11415-11424 (1999)		
	C L	LIPTON, <i>Nature</i> , 367, 113-114 (1994)		
	C M	MATSUSHITA et al., <i>J. Virology</i> , 62(6), 2107-2114 (1988)		
	C N	MCGROARTY, <i>FEMS Immunol. Med. Microbiol.</i> , 6, 251-264 (1993)		
	C O	MERIGAN, <i>Amer. J. Med.</i> , 90(Suppl. 4A), 8S-17S (1991)		
	C P	MICHALOWSKI et al., <i>Nucleic Acids Res.</i> , 18(8), 2186 (1990)		
	C Q	MITUYA et al., <i>Science</i> , 249, 1533-1544 (1990)		

Examiner Signature	Date Considered
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

Application Number	Unassigned 107513901
Filing Date	Herewith
First Named Inventor	BOYD et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	231119

Sheet	3	of	3
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Date Considered

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